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## Numerical Analysis, Approximation Theory, Differential Equations

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submissions:

**closed (31 July 2023)**

### Message from the Guest Editor

Dear Colleagues,

This Special Issue is mainly devoted to recent research results in numerical analysis, approximation theory (including multivariate interpolation), scientific computing, differential equations, and symmetries in the applied mathematics field. Numerical analysis and approximation theory are essential parts of the field of applied mathematics. They constitute fields of active research and continual development with applications to real life problems. For example, the results in domains such as wavelets, multivariate spline functions, radial functions, etc., have practical applications in the fields of computer aided design, geometric modelling, geodesy, image analysis, etc. The problem of the interpolation of arbitrarily spaced data is encountered in such areas as geology, cartography, earth sciences, etc. Symmetry methods also play an essential role in real world applications. Differential equations are essential tools for modeling different processes appearing in science. They give rise to important questions such as the existence and uniqueness of the solution, stability, numerical methods of approximation, symmetry methods of evolution equations, etc.



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# Special Issue



# symmetry



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## Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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